

### Claims

1. A method for measuring the resonant frequency of a resonant circuit, in particular of a heating  
5 circuit for a discharge lamp, by  
  
varying the frequency of a supply voltage for the resonant circuit within a predetermined frequency range,  
10  
  
measuring a voltage or a current across/in the resonant circuit as a function of the varied frequency,  
  
15 running through the predetermined frequency range is in both directions,  
  
in the process a maximum for the measured voltage or the measured current is established in each  
20 case, and the resonant frequency is determined from the two maxima.
2. The method as claimed in claim 1, in which, when  
25 varying the frequency of the supply voltage, the frequency range is run through, starting from the highest frequency to the lowest, or vice versa, and then back again.
3. The method as claimed in claim 1, in which the  
30 resonant frequency is determined by averaging the two frequencies, at which in each case a maximum is established.
4. The method as claimed in claim 1, in which a  
35 maximum is determined by a measured value being stored when this measured value is higher than the preceding one.

5. An apparatus for measuring the resonant frequency of a resonant circuit, in particular of a heating circuit for a discharge lamp, having
  - 5 a supply device for supplying the resonant circuit with a supply voltage, whose frequency can be varied within a predetermined frequency range, and
  - 10 a measuring device for measuring a voltage or a current across/in the resonant circuit as a function of a frequency,
  - 15 whereby it is possible to run through the frequency of the supply voltage in the predetermined frequency range at least once in both directions, and, in the process, to measure in each case a maximum for the voltage or the current, and
  - 20 to determine the resonant frequency from the two maxima with the aid of a determining device.
6. The apparatus as claimed in claim 5, in which, with the supply device, the frequency range of the
  - 25 supply voltage can be run through, starting from the highest frequency to the lowest, or vice versa, and then back again.
7. The apparatus as claimed in claim 5, in which an
  - 30 average for the two frequencies, at which in each case a maximum is established, can be determined as the resonant frequency with the aid of the determining device.
8. The apparatus as claimed in one of claims 5, in
  - 35 which the measuring device comprises a storage device which can be used to store a measured value

for determining a maximum when this measured value is higher than the preceding measured value.